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- [54] **HARDCOATS FOR FLAT PANEL DISPLAY SUBSTRATES**
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- [52] **U.S. Cl.** **106/287.14**; 428/412; 428/446; 428/447
- [58] **Field of Search** 106/287.14; 428/412, 428/446, 447

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[57] **ABSTRACT**

The present invention relates to a unique hard coating that provides the necessary characteristics for flat panel display plastic substrates because the coating is amorphous and is comprised of C, H, Si and O. The coating of the present invention is hard, optically transparent, scratch and abrasion resistant and hydrophobic. It is deposited by a low density, low temperature plasma enhanced chemical vapor deposition (PECVD) process and exhibits excellent barrier protection and reduced permeability to moisture, oxygen, helium and other vapors.

17 Claims, 3 Drawing Sheets